Topic – SQL Task – 1

TABLE : - Employee

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	JOHN	ABRAHAM	1000000	2013-01-01	Banking
2	MICHAEL	CLERK	800000	2013-01-01	INSURANCE
3	ROY	THOMAs	700000	2013-02-01	BANKING
4	TOM	JOSE	600000	2013-02-01	INSURANCE
5	JERRY	PINTO	650000	2013-01-01	INSURANCE
6	PHILIP	MATHEW	750000	2013-01-01	SERVICES
7	TESTNAME1	123	650000	2013-01-01	SERVICES
8	TESTNAME2	LNAME%	600000	2013-02-01	INSURANCE

TABLE :- Incentives

Incentives_id	EMPLOYEE_ID	INCENTIVE_DATE	INCENTIVE_AMT
1	1	2013-02-01	5000
2	2	2013-02-01	3000
3	3	2013-02-01	4000
4	1	2013-01-01	4500
5	2	2013-01-01	3500

QUERIES

a) Get First_name from employee table using alias name “Employee Name”.

➢SELECT First_Name AS "Employee Name" FROM Employee;

Employee Name
JOHN
MICHAEL
ROY
TOM
JERRY
PHILIP
TESTNAME1
TESTNAME2

b) Get FIRST_NAME, Joining year, Joining Month and Joining Date from employee table.

➢SELECT

FIRST_NAME,

YEAR(JOINING_DATE) AS Joining_Year,
MONTH(JOINING_DATE) AS Joining_Month,

DAY(JOINING_DATE) AS Joining_Date

FROM employee;

FIRST_NAME	Joining_Year	Joining_Month	Joining_Date
JOHN	2013	1	1
MICHAEL	2013	1	1
ROY	2013	2	1
TOM	2013	2	1
JERRY	2013	1	1
PHILIP	2013	1	1
TESTNAME1	2013	1	1
TESTNAME2	2013	2	1

C) Get all employee details from the employee table order by First Name Ascending and Salary descending?

- SELECT * FROM employee ORDER BY
  FIRST_NAME ASC,Salary DESC;

EMPLOYEE_ID	FIRST_NAME ▲ 1	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
5	JERRY	PINTO	650000	2013-01-01	INSURANCE
1	JOHN	ABRAHAM	1000000	2013-01-01	Banking
2	MICHAEL	CLERK	800000	2013-01-01	INSURANCE
6	PHILIP	MATHEW	750000	2013-01-01	SERVICES
3	ROY	THOMAs	700000	2013-02-01	BANKING
7	TESTNAME1	123	650000	2013-01-01	SERVICES
8	TESTNAME2	LNAME%	600000	2013-02-01	INSURANCE
4	TOM	JOSE	600000	2013-02-01	INSURANCE

d) Get employee details from employee table whose first name contains “o”.

- SELECT * FROM employee where FIRST_NAME LIKE '%o%';

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	JOHN	ABRAHAM	1000000	2013-01-01	Banking
3	ROY	THOMAs	700000	2013-02-01	BANKING
4	TOM	JOSE	600000	2013-02-01	INSURANCE

e) Get employee details from employee table whose joining month is “January”.

➢SELECT * FROM employee WHERE MONTH(Joining_date)=1;

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	JOHN	ABRAHAM	1000000	2013-01-01	Banking
2	MICHAEL	CLERK	800000	2013-01-01	INSURANCE
5	JERRY	PINTO	650000	2013-01-01	INSURANCE
6	PHILIP	MATHEW	750000	2013-01-01	SERVICES
7	TESTNAME1	123	650000	2013-01-01	SERVICES

f) Get department, total salary with respect to a department from employee table order by total salary descending.

➢SELECT department, SUM(salary) AS total_salary FROM employee GROUP BY department ORDER By total_salary DESC;

department	total_salary 1
INSURANCE	2650000
Banking	1700000
SERVICES	1400000

g) Get department wise maximum salary from employee table order by salary Ascending.

- SELECT department ,MAX(salary) AS max_salary FROM employee GROUP BY department ORDER BY max_salary ASC;

department	max_salary 1
SERVICES	750000
INSURANCE	800000
Banking	1000000

h) Select first_name,incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000.

➢SELECT e.FIRST_NAME, i.INCENTIVE_AMT

FROM employee e

JOIN incentives i ON e.employee_id = i.employee_id

WHERE i.INCENTIVE_AMT > 3000;

FIRST_NAME	INCENTIVE_AMT
JOHN	5000
ROY	4000
JOHN	4500
MICHAEL	3500

i) Select 2nd Highest salary from employee table.

➢SELECT MAX(salary) AS second_highest_salary

FROM employee WHERE salary < (SELECT MAX(salary) FROM employee);

second_highest_salary
800000

j) Select first_name, incentive amount from employee and incentives table for all Employee who got incentives using left join.

➢SELECT e.FIRST_NAME, i.INCENTIVE_AMT

FROM employee e

LEFT JOIN incentives i ON e.employee_id = i.employee_id;

FIRST_NAME	INCENTIVE_AMT
JOHN	5000
MICHAEL	3000
ROY	4000
JOHN	4500
MICHAEL	3500
TOM	NULL
JERRY	NULL
PHILIP	NULL
TESTNAME1	NULL
TESTNAME2	NULL

k) Create View OF Employee table in which store first name, last name and salary only.

➢ CREATE VIEW EmployeeView AS

SELECT first_name, last_name, salary

FROM Employee;

- Select *From employeeview;

first_name	last_name	salary
JOHN	ABRAHAM	1000000
MICHAEL	CLERK	800000
ROY	THOMAs	700000
TOM	JOSE	600000
JERRY	PINTO	650000
PHILIP	MATHEW	750000
TESTNAME1	123	650000
TESTNAME2	LNAME%	600000

L) Create Procedure to find out department wise highest salary.

m) Create After Insert trigger on Employee table which insert records in view table.

Task-2:

TABLE – SALES PERSON

SNO	SNAME	CITY	COMM
1001	PEEL	LONDON	0.12
1002	SERRES	SAN JOSE	0.13
1003	AXELROD	NEW YORK	0.1
1004	MOTIKA	LONDON	0.11
1007	RAFKIN	BARCELONA	0.15

TABLE – CUSTOMER

CNM	CNAME	CITY	RATING	SNO
201	HOFFMAN	LONDON	100	1001
202	GIOVANNE	ROME	200	1003
203	LIU	SAN JOSE	300	1002
204	GRASS	BARCELONA	100	1002
206	CLEMENS	LONDON	300	1007
207	PERIERA	ROME	100	1004

TABLE – ORDER

ONM	AMT	ODE	CNM	SNO
3001	18.69	1994-10-03	201	1007
3002	1900.1	1994-10-03	207	1004
3003	767.19	1994-10-03	201	1001
3005	3005	1994-10-03	203	1002
3006	3006	1994-10-04	201	1007
3007	3007	1994-10-05	204	1002
3008	3008	1994-10-05	206	1001
3009	3009	1994-10-04	202	1003
3010	3010	1994-10-06	204	1002
3011	3011	1994-10-06	206	1001

QUERIES

a) All orders for more than $1000.

- SELECT * FROM orders WHERE AMT > 1000;

ONM	AMT	ODE	CNM	SNO
3002	1900.1	1994-10-03	207	1004
3005	3005	1994-10-03	203	1002
3006	3006	1994-10-04	201	1007
3007	3007	1994-10-05	204	1002
3008	3008	1994-10-05	206	1001
3009	3009	1994-10-04	202	1003
3010	3010	1994-10-06	204	1002
3011	3011	1994-10-06	206	1001

b) Names and cities of all salespeople in London with commission above 0.10.

- SELECT SNAME, CITY FROM salesperson WHERE CITY = 'LONDON' AND COMM > 0.10;

SNAME	CITY
PEEL	LONDON
MOTIKA	LONDON

c) All salespeople either in Barcelona or in London.

- SELECT * FROM salesperson WHERE city IN ('Barcelona', 'London');

SNO	SNAME	CITY	COMM
1001	PEEL	LONDON	0.12
1004	MOTIKA	LONDON	0.11
1007	RAFKIN	BARCELONA	0.15

d) All salespeople with commission between 0.10 and 0.12. (Boundary values should be excluded).

- SELECT * FROM salesperson WHERE COMM BETWEEN 0.10 and 0.12;

SNO	SNAME	CITY	COMM
1001	PEEL	LONDON	0.12
1003	AXELROD	NEW YORK	0.1
1004	MOTIKA	LONDON	0.11

e) All customers with NULL values in city column.

- SELECT * FROM customer WHERE CITY IS NULL;

CNM	CNAME	CITY	RATING	SNO

f) All orders taken on Oct 3rd and Oct 4th 1994.

- SELECT * FROM orders WHERE ODE BETWEEN '1994-10-03' AND '1994-10-04';

ONM	AMT	ODE	CNM	SNO
3001	18.69	1994-10-03	201	1007
3002	1900.1	1994-10-03	207	1004
3003	767.19	1994-10-03	201	1001
3005	3005	1994-10-03	203	1002
3006	3006	1994-10-04	201	1007
3009	3009	1994-10-04	202	1003

g) All customers serviced by peel or Motika.

- SELECT * FROM salesperson WHERE SNAME='PEEL' or SNAME='MOTIKA';

SNO	SNAME	CITY	COMM
1001	PEEL	LONDON	0.12
1004	MOTIKA	LONDON	0.11

h) All customers whose names begin with a letter from A to B.

- SELECT * FROM customer WHERE CNAME LIKE 'A%' or CNAME LIKE 'B%';

CNM	CNAME	CITY	RATING	SNO

i) All customers excluding those with rating <=100 unless they are located in Rome.

- SELECT CNAME FROM customer WHERE RATING <=100 or CITY='ROME';

CNAME
HOFFMAN
GIOVANNE
GRASS
PERIERA

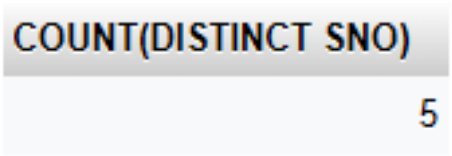
j) All orders except those with 0 or NULL value in amt field.

- SELECT * FROM orders WHERE AMT <> 0 AND AMT IS NULL;

ONM	AMT	ODE	CNM	SNO

k) Count the number of salespeople currently listing in the orders in the order table.

- SELECT COUNT(DISTINCT SNO)
  FROM orders;



COUNT(DISTINCT SNO)
5